

What is claimed is:

1. A method for adjusting the frequency of an electronic component device, the method comprising the steps of:

providing an electronic component device having an electrode disposed on a surface thereof;

etching the electrode disposed on the surface of the electronic component device by irradiating an ion beam on the electrode; wherein

the ion beam irradiation is performed while moving at least one of the electronic component device and the ion beam in at least one direction along the surface of the electronic component device on which the electrode is disposed.

2. The method according to Claim 1, wherein the ion beam irradiation is performed while moving at least one of the electronic component device and the ion beam in a plurality of directions within the surface of the electronic component device on which the electrode is disposed.

3. The method according to Claim 1, wherein the ion beam irradiation is performed while moving each of the electronic component device and the ion beam in at least one direction within the surface of the electronic component device on which the electrode is disposed.

4. The method according to Claim 1, wherein the ion beam irradiation is performed while the electronic component device is fixed and the ion beam is moved in at least one direction within the surface of the electronic component device on which the electrode is disposed.

5. The method according to Claim 1, wherein the ion beam irradiation is performed while the ion beam is fixed and the

electronic component device is moved in at least one direction within the surface of the electronic component device on which the electrode is disposed.

6. The method according to Claim 1, wherein the at least one direction of moving is along a length dimension of the surface of the electronic component device.

7. The method according to Claim 1, wherein the at least one direction of moving is along a width dimension of the surface of the electronic component device.

8. The method according to Claim 1, wherein the at least one direction of moving is along a direction other than a length dimension or a width dimension of the surface of the electronic component device.

9. The method according Claim 1, wherein the electronic component device is a surface acoustic wave device.

10. The method according to claim 9, wherein the surface acoustic wave device includes a piezoelectric substrate and an interdigital transducer having a plurality of electrode fingers disposed on a surface of the piezoelectric substrate, and the ion beam irradiation is performed while moving at least one of the electronic component device and the ion beam in a direction in which the electrode fingers extend.

11. The method according to Claim 1, wherein the electronic component comprises a piezoelectric oscillator.

12. The method according Claim 1, wherein when the ion beam irradiation is performed, the ion beam is bent by

applying an electric field or a magnetic field.

13. A method for adjusting the frequency of an electronic component device, the method comprising the steps of:

providing an electronic component device having an electrode disposed on a surface thereof;

etching the electrode disposed on the surface of the electronic component device by irradiating an ion beam on the electrode; wherein

the ion beam irradiation is performed while moving at least one of the electronic component device and the ion beam along a length dimension and a width dimension of the surface of the electronic component device on which the electrode is disposed.

14. The method according to Claim 13, wherein the ion beam irradiation is performed while moving each of the electronic component device and the ion beam in at least one direction within the surface of the electronic component device on which the electrode is disposed.

15. The method according to Claim 13, wherein the ion beam irradiation is performed while the electronic component device is fixed and the ion beam is moved along the length dimension and the width dimension of the surface of the electronic component device on which the electrode is disposed.

16. The method according to Claim 13, wherein the ion beam irradiation is performed while the ion beam is fixed and the electronic component device is moved along the length dimension and the width dimension of the surface of the electronic component device on which the electrode is disposed.

17. The method according to Claim 13, wherein the ion beam irradiation is performed while moving at least one of the electronic component device and the ion beam along a direction other than the length dimension and the width dimension of the surface of the electronic component device.

18. The method according Claim 13, wherein the electronic component device is a surface acoustic wave device.

20. The method according to claim 18, wherein the surface acoustic wave device includes a piezoelectric substrate and an interdigital transducer having a plurality of electrode fingers disposed on a surface of the piezoelectric substrate, and the ion beam irradiation is performed while moving at least one of the electronic component device and the ion beam in a direction in which the electrode fingers extend.

21. The method according to Claim 13, wherein the electronic component comprises a piezoelectric oscillator.

22. The method according Claim 13, wherein when the ion beam irradiation is performed, the ion beam is bent by applying an electric field or a magnetic field.